DOCUMENT RESUME

ED 045 845 VT 012 343

AUTHOR Stogdill, Ralph M.; And Others
TITLE Response of Vocational Students to Supervision: Effects of Reinforcing Positive and Negative Attitudes Toward Different Supervisory Roles.
INSTITUTION Ohio State Univ., Columbus. Center for Vocational and Technical Education.
SPONS AGENCY Office of Education (DHEW), Washington, D.C.
REPORT NO RD-Ser-NC-44
PUB DATE Dec 70
NOTE 61p.
AVAILABLE FROM The Center for Vocational and Technical Education, The Ohio State University, 1900 Kenny Road, Columbus, Ohio 43210

EDRS PRICE EDRS Price MF-$0.50 HC-$3.15
DESCRIPTORS Behavior Development, *Negative Reinforcement, *Positive Reinforcement, *Predictive Measurement, Secondary School Students, *Student Attitudes, *Supervision, Vocational High Schools

ABSTRACT

This study was designed to determine whether student response to supervision would be affected by the reinforcement of positive (or negative) attitudes toward five patterns of supervisory behavior as shown in motion pictures. For one group of vocational high school students, attitudes toward the supervisory roles "Consideration" and "Tolerance of Freedom" were reinforced, and negative attitudes toward "Structuring Expectations" and "Production Emphasis" were reinforced. For a second group, the opposite reinforcement procedure was employed. The experimental groups did not differ significantly on the before and after tests or adjustment to supervision. However, the group that received negative reinforcement of Consideration and Freedom was rated significantly poorer in adjustment to supervision than the group that received positive reinforcement of Consideration and Freedom. Reinforcement of negative attitudes toward the more highly valued roles was associated with poor adjustment to supervision after the experiment. A number of theoretical questions need to be answered before the reinforcement of attitudes can be recommended as a method for assisting vocational students to accept supervision. (Author)

The Center for Vocational and Technical Education
The Ohio State University
1900 Kenny Road
Columbus, Ohio 43210

ED045845

Response of Vocational Students to Supervision

VT012343

Research and Development
Series No. 44

The Center for Vocational and Technical Education has been established as an independent unit on The Ohio State University campus with a grant from the Division of Comprehensive and Vocational Education Research, U.S. Office of Education. It serves a catalytic role in establishing consortia to focus on relevant problems in vocational and technical education. The Center is comprehensive in its commitment and responsibility, multidisciplinary in its approach, and interinstitutional in its program.

The major objectives of The Center follow:

1. To provide continuing reappraisal of the role and function of vocational and technical education in our democratic society;

2. To stimulate and strengthen state, regional, and national programs of applied research and development directed toward the solution of pressing problems in vocational and technical education;

3. To encourage the development of research to improve vocational and technical education in institutions of higher education and other appropriate settings;

4. To conduct research studies directed toward the development of new knowledge and new applications of existing knowledge in vocational and technical education;

5. To upgrade vocational education leadership (state supervisors, teacher educators, research specialists, and others) through an advanced study and in-service education program;

6. To provide a national information retrieval, storage, and dissemination system for vocational and technical education linked with the Educational Resources Information Center located in the U.S. Office of Education.

ED0 45845

RESEARCH AND DEVELOPMENT
SERIES NO. 44

RESPONSE OF VOCATIONAL STUDENTS TO SUPERVISION:

EFFECTS OF REINFORCING POSITIVE AND NEGATIVE ATTITUDES TOWARD DIFFERENT SUPERVISORY ROLES

RALPH M. STOGDILL

with

NICHOLAS P. COADY and ADELE ZIMMER

The Ohio State University

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

The Center for Vocational and Technical Education
The Ohio State University
1900 Kenny Road
Columbus, Ohio 43210

DECEMBER 1970

Interim Report

Project No. 7-0158

Grant No. OEG-3-7-000158-2037

The material in this publication was prepared pursuant to a grant with the Office of Education, U.S. Department of Health, Education and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their judgment in professional and technical matters. Points of view or opinions do not, therefore, necessarily represent official Office of Education position or policy.

This publication has been prepared for distribution to selected agencies and individuals on a complimentary basis as permitted by funding under the terms of the federal grant. Additional copies have been produced from local funds for distribution on a cost recovery basis to assure wider dissemination of the document.

U.S. DEPARTMENT OF
HEALTH, EDUCATION AND WELFARE

Office of Education
Bureau of Research

FOREWORD

Traditionally, educational theorists have maintained that it is the function of the school to impart knowledge and skills to students. A more recent trend of thought has proposed that it is the obligation of the school to instill various attitudes and values in students.

Results of the present study raise important questions regarding the desirability of reinforcing attitudes that are contrary to students' established value systems. Further investigation will be required to resolve these questions. Nevertheless, the research reported herein is significant in that it has developed methods for producing information that has a direct bearing on fundamental problems in philosophy and instructional practice, not only for vocational education, but for education in general.

The senior investigator of the study, Dr. Ralph M. Stogdill, is Director of the Program for Research in Leadership and Organization and Professor of Management Sciences at The Ohio State University. Dr. Stogdill's report of this study to the American Psychological Association during its 1970 annual meeting received first prize in the Research Award Program of the Division of Consulting Psychology.

Robert E. Taylor
Director
The Center for Vocational
and Technical Education

ACKNOWLEDGMENTS

This experiment was made possible by the collaboration of the Theodore Ahrens Trade High School of Louisville, Kentucky, and by the Central High School of Louisville, Kentucky.

Special thanks are due Jerry Shuck and George H. Todd, Division of Vocational Education, Department of Instruction, Louisville Public Schools, for their support of the research.

We wish to thank Lawrence Burdon, Principal of Theodore Ahrens Trade High School, and J. W. Hackett, Principal of Central High School, for their support and collaboration.

Ralph M. Stogdill
Nicholas P. Coady
Adele Zimmer

ABSTRACT

This study was designed to determine whether student response to supervision would be affected by the reinforcement of positive (or negative) attitudes toward five patterns of supervisory behavior shown in motion pictures.

For one group of subjects, positive attitudes toward the supervisory roles Consideration and Tolerance of Freedom were reinforced, and negative attitudes toward Structuring Expectations and Production Emphasis were reinforced. For a second group of subjects, the opposite reinforcement procedure was employed. Reinforcement attempts consisted of favorable (or unfavorable) questions and comments made by the discussion leader. The subjects were students in two vocational high schools who had been rated on a scale of adjustment to supervision before discussion of the films. They were rated again on the same scale nine to 11 weeks after discussion.

The experimental groups did not differ significantly on the before- and after-tests of adjustment to supervision. However, the group that received negative reinforcement of Consideration and Freedom was rated significantly poorer in adjustment to supervision than the group that received positive reinforcement of Consideration and Freedom. Reinforcement of negative attitudes toward the more highly valued roles was associated with poor adjustment to supervision after the experiment.

CONTENTS

FOREWORD . . . . . *iii*

ACKNOWLEDGMENTS . . . . . *v*

ABSTRACT . . . . . *vii*

I. INTRODUCTION 3

II. METHOD 9

III. RESULTS 15

IV. SUMMARY AND DISCUSSION 35

REFERENCES 41

APPENDIX A 45

APPENDIX B 49

APPENDIX C 55

RESPONSE OF VOCATIONAL STUDENTS TO SUPERVISION:

EFFECTS OF REINFORCING POSITIVE AND NEGATIVE ATTITUDES TOWARD DIFFERENT SUPERVISORY ROLES

I. INTRODUCTION

The vocational school graduate upon entering the world of work must adapt not only to the technical aspects of his job, but also to the people with whom he works. An important aspect of his willingness and ability to hold a job is his relationship with his supervisor. If a student has developed a resentment against authority at home and in the community, his antagonism may manifest itself at school and on the job. One of the efforts made by the progressive vocational school is to assist the disaffected student to accept and understand supervision. Some teachers appear to be naturally gifted at winning the cooperation of students who are defiant and troublesome. Others find that they must work consciously at the task.

No well-defined methods have been developed for helping students to adjust favorably to supervision. In a previous report (Stogdill and Bailey, 1969), the authors reviewed some of the experimental literature on methods of behavior change. It was found that attitudes are responsive to various training methods. However, it is more difficult to demonstrate that training produces change in overt behavior. Role playing and the use of motion pictures appeared to offer some promise as methods of producing behavior change. Lange, Rittenhouse, and Atkinson (1968) have demonstrated that discussion of motion pictures of leadership situations improves the quality of subjects' solutions to leadership problems.

THE USE OF MOTION PICTURES FOR BEHAVIOR CHANGE

Role playing, although a promising training method, is extremely time-consuming. Only a few students engage in role playing at a given time. Other students in the training group merely act as observers, and at times as discussants.

It occurred to the authors that different role performances might be presented by means of motion pictures. The identical role could then be shown to different groups of students. Such a standardized role performance could be presented to different groups for comparative studies. As a result of these considerations, five films were produced. These are called *Incidents in Leadership*.[1] Each film shows a supervisor, with the aid of two

[1]The films are distributed by The Department of Photography and Cinema, The Ohio State University, 156 West 19th Avenue, Columbus, Ohio 43210.

subordinates, acting out a given role. The scene is the supervisor's office in an industrial situation. The five roles are as follows:

1. Representation
2. Structure
3. Consideration
4. Tolerance of Freedom
5. Production Emphasis.

The five roles represent important dimensions of leader behavior identified by research on the Leader Behavior Description Questionnaire (Stogdill, Goode, and Day, 1963). The roles have been shown (Stogdill, 1965) to be related to different aspects of employee satisfaction and group performance. A Manual (Stogdill, Bailey, and Coady, 1969) has been prepared for use of the motion pictures in management development courses as well as in student training.

RESULTS OF A PRIOR EXPERIMENT

The films were used (Stogdill and Bailey, 1969) in an experimental training project in three vocational high schools. The films were shown one each day over a period of five days to groups of six to 10 students. Each group included equal numbers of students who were rated by their teachers as responding favorably to supervision and unfavorably to supervision.

One of the researchers acted as discussion leader immediately after a film was shown. Questions were asked when necessary to keep discussion moving, but no attempt was made to influence either a favorable or an unfavorable attitude toward any of the supervisory roles. The most talkative member of the group appeared to influence the attitudes of his fellow group members. As a result, some groups expressed a dominantly favorable attitude, while others exhibited an unfavorable attitude, toward the same role.

It was found that the students who had been rated by their teachers as responding poorly to supervision before discussion of the movies were rated as responding significantly better to supervision several weeks later. The control group of poorly adjusted students (those with low initial ratings) who had not seen the movies did not change significantly in ratings of adjustment to supervision.

Both the experimental and control groups that were rated initially high in response to supervision received lower ratings several weeks later. However, the experimental group that had discussed the movies lost less than its control group. It was concluded that both the poorly adjusted and well adjusted groups profited from discussion of the movies when compared with their respective control groups. The results were interpreted as suggesting that insight into the "whys" and "wherefores" of supervisory behavior enabled disaffected students to respond more favorably to supervision.

SOME QUESTIONS NOT ANSWERED BY THE RESEARCH

In the research described above, some groups exhibited a favorable attitude toward a given role. Other groups exhibited an unfavorable attitude toward the same role. This diversity of attitude was apparent for all the roles. The question arose as to whether greater change in behavior might have occurred had all the groups exhibited the same attitude toward the same pattern of behavior. In other words, could adjustment to supervision be enhanced if the experimenters were to encourage uniformly favorable attitudes toward some of the roles shown in the films and unfavorable attitudes toward other roles?

An attempt to strengthen a given attitude or response is often referred to as a "reinforcement." In the experimental laboratory, reinforcement is accomplished by various methods, often by presenting a reward when a desired response is exhibited by the subject. Not all reinforcement attempts appear to strengthen attitude or response. What is meant by the statement that a given attitude was reinforced is that an attempt was made to strengthen the attitude in an experiment designed to determine whether any strengthening actually occurred.

The question next arose as to what attitudes should be reinforced. Previous research with the Leader Behavior Description Questionnaire (Stogdill, Nickels, and Zimmer, 1970) indicated that, for some samples, Consideration and Tolerance of Freedom are perceived as being highly related forms of behavior. Structure and Production also are perceived as similar to each other, but different from Consideration and Freedom. Several recent theorists, particularly Argyris (1957) and McGregor (1960), have advanced the hypothesis that individuals exhibit needs for autonomy and self actualization that can be realized best when they work under the supervisors who are considerate of their needs and provide them with freedom for decision and action. It was also hypothesized that high degrees of structure and emphasis on production tend to stifle autonomy and self actualization.

The views of Argyris and McGregor suggested that Consideration and Tolerance of Freedom should be considered as a pair of roles that should be reinforced in a positive direction, while Structuring Expectations and Production Emphasis constitute a separate pair that should be reinforced in the opposite direction in order to enhance the desired attitudes.

An alternative hypothesis occurred to the writers. If young people have developed unfavorable attitudes toward supervision and authority, it may be that they would place an extremely high value on Consideration and Freedom, but an extremely low value on Structure and Production. If such were the case, might there not be some gain in response to supervision by strengthening favorable attitudes toward Structure and Production while strengthening unfavorable attitudes toward Consideration and Freedom?

It was decided to investigate both sets of hypotheses. The question to be answered by the research is as follows: "Can favorable response to supervision be enhanced by strengthening favorable attitudes toward one set of supervisory roles and by strengthening unfavorable attitudes toward a second set of roles?"

REVIEW OF SOME RELATED RESEARCH

Recent research on verbal conditioning suggests that attitudes can be strengthened by reinforcement. Krasner's (1958) review of the experimental work on verbal conditioning indicates that a subject's use of selected words can be increased by reinforcing the sentences in which he uses the words.

Verplanck (1955) reinforced subjects' statements of opinion by agreeing with the statements. Non-reinforcement consisted of remaining silent after an opinion was expressed. It was found that reinforcement significantly increased expressions of opinion, while non-reinforcement decreased the rate of expression. Insko (1965) contacted 72 of his college students by telephone and asked them to state the degree to which they agreed or disagreed with 14 statements of opinion. Half the subjects were given positive reinforcement ("good") when they expressed agreement (or disagreement) with the statements. The other half was given negative reinforcement ("I wonder," "Do you really think so?") for positive (or negative) statements. It was found that reinforcement resulted in attitude change as measured by the attitude scales administered (before and after) in class. Positive reinforcement produced greater change toward more positive attitudes than negative reinforcement resulted in change toward less favorable attitudes.

Watts (1967) compared subjects who wrote arguments in support of an opinion with other subjects who merely read arguments in favor of the opinion. Active participation (writing) produced

greater opinion change than passive participation (reading), and was related six weeks later to greater discussion and reading about the subject matter of the opinion.

Bryan and Lichtenstein (1966) paired subjects who were led to believe that their partners would exhibit either desirable, neutral, or undesirable personality traits. Subjects using sentences beginning with "I" or "We" were reinforced by the word "Good." Both positive and negative attitudes toward the reinforcing partner facilitated conditioning (i.e., the use of sentences beginning with "I" or "We"). Subjects in the neutral condition were not affected by reinforcement. Thus, attitude toward reinforcer affects conditioning. Awareness of the conditioning contingencies was not related to conditioning.

Hildum and Brown (1956) found that saying "Good" reinforced positive attitudes, while saying "Mmm-hmm" did not. Spielberger, Bernstein, and Ratliff (1966) reported that conditioning is related to the subject's desire for the experimenter to say "Good." That is, those subjects who desired positive reinforcement were more responsive to conditioning than those who were indifferent. In a prior study, Spielberger, Berger, and Howard (1963) found that desire for positive reinforcement was not directly related to reinforcement. However, aware subjects who were motivated to receive reinforcement exhibited higher rates of conditioned response than unmotivated aware subjects. Spielberger (1962), Spielberger, Levin, and Shepard (1962), and Dulany (1962) maintain that subject awareness of the reinforcement contingencies are necessary for verbal conditioning.

Sapolsky (1960) assembled subjects who were similar or dissimilar in personality profile scores. Incompatability (dissimilarity) between reinforcers and subject suppressed the effects of reinforcement. Ferguson and Buss (1959) found that aggressive behavior on the part of the reinforcer (experimenter) inhibited conditioning. Ekman (1958) found that verbal behavior ("Good") and nonverbal behavior (head nod) were equally effective in conditioning opinion. However, nonverbal reinforcement produced greater counter conditioning than verbal reinforcement. It was suggested that counter conditioning may be attributed to a personality reaction such as negativism or rigidity.

Several studies have suggested that the social class of the subject may affect conditioning. Zigler and Kanzer (1962) found that praise reinforcers were more effective than correctness reinforcers with lower-class children, while correctness reinforcers were more effective than praise reinforcers with middle-class children. That is, lower-class children are more responsive to reinforcers connoting praise ("Good," "Fine") while middle-class children respond more readily to reinforcers implying accuracy ("Right," "Correct"). Rosenhan and Greenwald (1965) found,

however, that age is more important than social class in determining response to reinforcement. As lower-class children become older, they are also responsive to abstract reinforcements. Sgan (1967) found that working-class boys are significantly less responsive to experimenter influence than working-class girls or middle-class boys and girls.

IMPLICATIONS FOR THE PRESENT RESEARCH

The above research indicates that an attitude can be strengthened when the experimenter says "Good" or "I agree" each time the subject expresses an attitude that the experimenter wants to reinforce. An attitude can be weakened by saying "I wonder," "Do you really think so?" and the like, in response to an attitude statement by the subject. However, certain variables such as age, sex, and social class, may affect response to reinforcement attempts.

In view of the results of the previous research, verbal reinforcement appeared to be an appropriate method for use in the present research.

II. METHOD

The research was conducted in four steps, as follows:

1. Administration of before-tests
2. Selection of sample
3. Presentation and discussion of motion pictures
4. Administration of after-tests

The research was carried out with the cooperation of two vocational and technical high schools. Both are modern, well equipped, well staffed, and progressive schools. Both schools provided high degrees of administrative support. Pupil and staff morale appeared to be high. One of the schools celebrated the winning of the basketball championship of its state shortly before the research was initiated in the school.

ADMINISTRATION OF BEFORE-TESTS

The first step in the research was to ask the teachers of strictly vocational classes to rate their students on a 12-item Behavior Description Scale, designed to measure adjustment to supervision. A copy of the scale along with the scoring key is shown in Appendix A. Students receiving low scores were designated as "poorly adjusted to supervision." Those receiving high scores were designated "well adjusted to supervision." These scores were used to select the experimental and control groups from the total population of students that was rated by their teachers.

All students who were rated by their teachers on the Behavior Description Scale were asked to complete the Ideal Form of the Leader Behavior Description Questionnaire (LBDQ). A copy of the scale with scoring key is shown in Appendix B. This form asks the subject to respond to each item by indicating how he believes a supervisor ought to act in order to be a good leader. It measures attitude toward different patterns of supervisory behavior. The patterns of behavior are as follows:

Representation - speaks and acts as the representative of the group.

Structure - lets followers know what is expected of them and what they can expect of their leader.

Consideration - is considerate of follower welfare, comfort, and suggestions.

Tolerance of Freedom - tolerates follower freedom for decision and action; encourages initiative.

Production Emphasis - pushes for high levels of productivity; attempts to motivate increased output.

The before-tests consisted of: 1) teachers' ratings of students' adjustment to supervision, and 2) students' responses to the Ideal LBDQ.

SELECTION OF THE SAMPLE

Students enrolled in the vocational curriculum were selected for the samples. The classes in which they were enrolled were as follows: Sheet Metal, Electronics, Commercial Art, General Shop, Plumbing, Carpentry, Welding, Commercial Foods, Drafting, Electricity, Auto Mechanics, Machine Shop, Book Binding, Graphic Arts, Printing, Upholstery, Cabinet Making, Dry Cleaning, and Tailoring. The total number of students rated by their teachers was 322 in School A, and 163 in School B. Teachers in School B tended to rate students somewhat higher in response to supervision than did teachers in School A. The distributions and means of the "before" ratings for the two schools are shown in Table 1.

Since it was thought that well adjusted and poorly adjusted students might respond differently to training, it was decided to include both types of students in the experiment. Students were selected on the basis of teachers' ratings on the Behavior Description Scale. Eighty-eight students (50 in School A and 38 in School B) receiving very low ratings were designated poorly adjusted or "Low." They were divided equally into an experimental group (Exp - Lo) and a control group (Con - Lo). Equal numbers of students with very high ratings were also assigned to experimental (Exp - Hi) and control (Con - Hi) groups. The numbers of students in the different groups and their average ratings on adjustment to supervision are shown in Table 2. It will be noted that in each school the experimental groups were quite evenly matched with their control groups on average behavior ratings.

Only students in the two experimental groups (Exp - Lo and Exp - Hi) were shown the films. An attempt was made to match students as closely as possible on the basis of adjustment ratings when assigning them to the two different training (reinforcement) methods. However, due to scheduling problems, the two schools

TABLE 1

DISTRIBUTION OF BEHAVIOR DESCRIPTION SCORES
FOR TWO SCHOOLS - PRETEST

Score	School A	School B	Total
57-60	73	40	113
53-56	62	45	107
49-52	33	31	64
45-48	52	20	72
41-44	40	8	48
37-40	29	7	36
33-36	18	4	22
29-32	9	7	16
25-28	4		4
21-24	2	1	3
N	322	163	485
M	48.42	50.74	49.21
SD	8.62	7.72	8.40

TABLE 2

BEHAVIOR DESCRIPTION RATINGS ON THE PRETEST
FOR THE EXPERIMENTAL AND CONTROL GROUPS

Group	School A		School B		Total	
	N	M	N	M	N	M
Experimental - High	25	51.00	19	54.90	44	52.68
Control - High	25	51.08	18	54.42	43	52.48
Experimental - Low	25	33.64	19	36.75	44	34.98
Control - Low	25	33.88	19	36.73	44	35.11
Total	100	42.40	75	45.53	175	43.74

were not equally represented in the two different reinforcement conditions. Even so, the students assigned to the different reinforcement conditions were very closely matched on behavior ratings.

Students assigned to the experimental sample were shown five motion pictures. The films were shown to small groups composed of three to five students with low behavior ratings and three to five students with high ratings. In other words, the experimental groups consisted of six to 10 students, some with low adjustment ratings and others with high ratings.

Some shrinkage in final sample occurred due to illness, absenteeism, dropout, and lack of interest in the research.

THE EXPERIMENTAL PROCEDURE

The experimental groups were shown five films, one each day, over a period of five days. Immediately following the film, a discussion period of 35 to 50 minutes was conducted. The junior member of the research team acted as discussion leader. However, the discussion procedure was not identical for all the groups.

For one set of experimental groups, the discussion leader attempted to reinforce a favorable attitude toward the supervisors who played the roles for Consideration and Tolerance of Freedom. For these same groups, he attempted to reinforce an unfavorable attitude toward those supervisors who played the roles for Structure and Production Emphasis.

The remaining set of experimental groups was treated in the opposite manner. For them, the discussion leader attempted to reinforce a favorable attitude toward Structure and Production Emphasis, but an unfavorable attitude toward Consideration and Tolerance of Freedom.

Positive reinforcement attempts involved asking favorably phrased questions, and by saying, "Good," "Fine," "I agree," and the like, when a student made a comment that was favorable toward a given supervisory role. Negative reinforcement attempts involved questions that were phrased in an unfavorable direction, and by saying, "I wonder?" "Do you really think so?" "I'm afraid that some of us disagree," and the like. Questions used in attempts to build up favorable or unfavorable attitudes toward each role are shown in Appendix C.

ADMINISTRATION OF AFTER-TESTS

Several weeks after discussion of the movies all students were again rated by their teachers on the Behavior Description

Scale. The students themselves again filled out the Ideal Form of the Leader Behavior Description Questionnaire. The interval between discussion of the movies and the administration of the after-tests was nine weeks for School A, and 11 weeks for School B.

SUMMARY OF METHOD

The first step in the research was to administer the before-tests. Scores on a scale measuring adjustment to supervision were used to select experimental and control samples. Half of the experimental groups, after being shown a film, were influenced to exhibit favorable attitudes toward Consideration and Tolerance of Freedom, and less favorable attitudes toward Structure and Production Emphasis. The remaining groups were influenced to exhibit favorable attitudes toward Structure and Production and less favorable attitudes toward Consideration and Freedom. Several weeks later, after-tests were administered to determine whether any change in behavior could be observed.

III. RESULTS

The research was designed to answer several questions about the effects of the training procedures on student attitudes and behavior. Specifically, it was desired to answer the following questions:

1. Will reinforcement have an immediate effect on students' attitudes toward the different supervisory roles?

2. Will reinforcement of a positive or negative attitude toward a given role affect response to supervision as measured by teachers' ratings of student behavior?

3. Will reinforcement of positive or negative attitudes toward a given role be reflected in students' before and after scores on the Leader Behavior Description Questionnaire?

4. Do well adjusted and poorly adjusted students respond alike to reinforcement?

5. Is student attitude associated with behavior?

An attempt will be made in the following discussion to answer the above questions.

IMMEDIATE EFFECTS OF REINFORCEMENT ON ATTITUDE

Evidence that the reinforcement attempts were generally successful in the intended direction is presented in Table 3. Immediately after the five films had been seen and discussed, the students were asked to indicate which roles they would prefer as supervisors. Each student ranked the roles from 1 (most preferred) to 5 (least preferred). If a student was absent for an experimental session, his ranking for that role was not included in the tabulation because he could not know whether or not he would like that style of supervision. For this reason, the numbers of cases are not equal for the different rows in Table 3.

Attempts to strengthen (reinforce) a favorable attitude toward Consideration and Structure and to strengthen an unfavorable attitude toward Structure and Production are designated (C & F +; S & P -). Attempts to strengthen a favorable attitude toward

TABLE 3

DISTRIBUTION OF RANKS (INDICATING PREFERENCES FOR FIVE SUPERVISORY ROLES) BY STUDENTS AFTER TWO DIFFERENT TYPES OF REINFORCEMENT

Supervisor Role	Reinforcement									
	(C & F+); (S & P-)					(S & P+); (C & F-)				
	Rank Order of Preference					Rank Order of Preference				
	1st	2nd	3rd	4th	5th	1st	2nd	3rd	4th	5th
	Frequency Distribution					Frequency Distribution				
Consideration	27	3				22	7	1	3	2
Freedom		6	15	4	3	1	6	7	12	9
Representation	2	10	8	2	2		5	12	12	3
Structure	1	9	5	14		9	16	6	1	1
Productivity		1	1	8	20	5	3	10	7	7
	Percentage Distribution					Percentage Distribution				
Consideration	90	10				63	20	3	8	6
Freedom		21	54	14	11	3	17	20	34	26
Representation	8	42	33	8	8		15	38	38	9
Structure	3	31	17	48		27	48	18	3	3
Productivity		3	3	27	67	16	9	31	22	22

Structure and Production along with an unfavorable attitude toward Consideration and Freedom are designated (S & P +; C & F -).

It may be seen in Table 3 that the students exhibited a greater preference for Consideration, Tolerance of Freedom, and Representation when Consideration and Freedom were positively reinforced (C & F +) than when these two roles were negatively

reinforced (C & F -). They exhibited a greater preference for Structuring Expectations and Production Emphasis when these two roles were positively reinforced (S & P +) than when they were negatively reinforced (S & P -).

Consideration was the most highly preferred role under both conditions of reinforcement. When the role was positively reinforced (C & F +), 90 percent of the students preferred it above all of the other roles. When the role was negatively reinforced, 37 percent of the students rated Consideration as second, third, fourth, or fifth in preference. The difference in distribution of preference rankings under the two reinforcement conditions is not statistically significant by a Chi square test.

Tolerance of Freedom was not a well liked role under either reinforcement condition. Under positive reinforcement, 25 percent ranked it fourth or fifth in order of preference, while under negative reinforcement 60 percent ranked it fourth or fifth. The Chi square test was significant at the .05 level.

Preference for Representation, although it was not reinforced in either direction, was higher under positive reinforcement of Consideration and Freedom than under positive reinforcement of Structure and Production. The proportion of first and second choices to third, fourth, and fifth choices was 12 to 12 for C & F +, while the ratio was five to 27 for S & P +. The Chi square test was significant at the .02 level.

Preference for Structuring Expectations was significantly higher at the .001 level under positive reinforcement of Structure and Production than under the opposite condition. The ratio of first and second choice to other choices was 25 to eight under S & P +, while the ratio was 10 to 19 under C & F +.

The rankings for Production Emphasis also responded significantly to reinforcement. Whereas this pattern of behavior received only two first, second, or third choices under positive reinforcement of Consideration and Freedom along with negative reinforcement of Structure and Production, it received 18 first, second, or third choices under positive reinforcement of Structure and Production. The Chi square test was significant at the .001 level.

The above results suggest that Structuring Expectations and Production Emphasis were the roles for which preference was most easily influenced by reinforcement attempts. Preference for Representation and Tolerance of Freedom responded to a lesser, but significant degree. Preference for Consideration was not significantly influenced by reinforcement. Considering all the roles, it can be concluded that the reinforcement attempts were successful in influencing preference in the directions intended.

EFFECTS OF REINFORCEMENT ON RESPONSE TO SUPERVISION

It will be recalled that teachers rated their students on a Behavior Description Scale immediately before discussion of the films and again several weeks after. Students receiving the lowest scores were designated as poorly adjusted to supervision; those with the highest scores as well adjusted. Students who saw and discussed the films constituted the experimental (Exp.) group. Those who did not see the films constituted the control (Con.) group. Those with low behavior adjustment scores constituted a low (Lo) group; those with high scores a high (Hi) group.

Average behavior ratings of the experimental and control groups before and after the experiment are shown in Table 4. All of the experimental groups were rather closely matched with their respective control groups before the research began. The low scoring control group was the same for both low scoring experimental groups. Similarly, both high scoring experimental groups had the same control group.

TABLE 4

MEANS AND STANDARD DEVIATION OF ADJUSTMENT RATINGS OF STUDENTS BEFORE AND AFTER EXPERIMENTAL REINFORCEMENT

Group	Reinforcement Conditions								
	Control (None)			(C & F+) (S & P-)			(S & P+) (C & F-)		
	N	M	SD	N	M	SD	N	M	SD
Lo-Before	31	35.45	4.46	16	36.81	5.71	12	35.50	6.39
Lo-After	31	42.03[a]	7.78	16	40.63	8.27	12	34.25[b]	8.26
Hi-Before	34	52.32	3.93	16	53.25	3.50	20	52.60	3.73
Hi-After	34	51.38	7.23	16	54.19	6.27	20	51.85	6.75

[a]The difference between the before and after means for the low control group is significant at the .01 level.

[b]The mean (34.25) of the low S & P +; C & F - group differs significantly from that (42.03) of the low control group at the .01 level, and from the mean (40.63) of the low C & F +; S & P - group at the .05 level.

Both of the poorly adjusted (Lo) experimental groups were well matched with their control group before the research began. Both, however, were rated lower than their control group after the experiment. The mean (34.25) for the group that received positive reinforcement of Consideration and Structure along with negative reinforcement of Consideration and Freedom was significantly lower at the .01 level than the mean (42.03) of the control group.

The well adjusted (Hi) experimental groups were also closely matched with their control group before the experiment. Neither differed significantly from the control group after reinforcement.

When "before" and "after" ratings are compared, one significant difference was found. The poorly adjusted (Lo) control group was rated significantly higher on the second rating (M = 42.03) than on the first (M = 35.45). The difference was significant at the .01 level.

Results for the control groups suggest that teachers tended to rate poorly adjusted students higher, and well adjusted students somewhat lower, on the second rating than on the first. It would appear that both types of reinforcement prevented the poorly adjusted (Lo) groups from reaping the benefits of greater teacher leniency on the second rating. None of the differences, however, is statistically significant.

Both the poorly adjusted (Lo) and well adjusted (Hi) groups appear to have responded differently to the two types of reinforcement. Under positive reinforcement of Consideration and Freedom (C & F +), both groups were rated somewhat higher on the second rating than on the first. Under positive reinforcement of Structure and Production (S & P +), both groups were rated slightly lower on the second evaluation than on the first.

It may be seen in Table 4 that for each group the standard deviation of the after-test is much larger than that of the before-test. The same tendency in teachers' ratings was observed in a previous study of three schools (Stogdill and Bailey, 1969). Teachers tend to become more discriminating after their first use of the behavior rating scale. They differentiate more clearly between students, and they give fewer students the highest possible rating. These tendencies result in comparatively high variances for the second (after) rating.

VARIANCE ANALYSIS OF BEHAVIOR RATINGS

The foregoing discussion suggests that the two types of reinforcement produced different effects on students. One wonders whether type of reinforcement might have interacted with type of

student (Hi or Lo) to influence the results. Analysis of variance is a method of analysis that permits an answer to this question. The analysis is greatly simplified if there are equal numbers of cases in each subgroup.

The smallest subgroup (N = 12) was the poorly adjusted (Lo) experimental group that received positive reinforcement of Structure and Production (S & P +; C & F -). The before and after scores (behavior adjustment ratings) for this group are entered in columns 11 and 12 of Table 5. The before and after scores of 12 students were selected from each of the other groups--experimental and control, high and low. For each subgroup the means and standard deviations are very similar to those of the larger groups from which the 12 were drawn. Results of the analyses are shown in Table 6. There is no significant variance between before-test and after-test. The difference between the high and low groups is significant at the .01 level. This result is to be expected, due to the fact that the high and low groups were originally selected to be as different as possible. There is significant variance at the .05 level associated with reinforcement condition (no reinforcement; C & F +; S & P +). There were no significant interaction effects. It may be concluded, then, that reinforcement resulted in significant variance between the six groups of subjects.

Further insight can be gained by isolating sections of Table 5 for separate analysis. Data for the control group and the C & F + group (columns 1 to 8) were analyzed. The results are shown in Table 7. Significant variance was found between before-test and after-test, and also between high group and low group. There was also significant interaction between Time (Before-After) and Group (Hi-Lo). One of the high groups did better on the before-test than on the after-test, while both low groups did better on the after than on the before-test.

The analysis for the control group and S & P + group was based on columns 1, 2, 3, 4, 9, 10, 11, and 12 in Table 5. Results of the analysis are shown in Table 8. There was significant variance, as expected, between the Hi and Lo groups. There was also significant interaction between group (Hi-Lo) and Condition (reinforcement or no reinforcement). The high control group was rated lower than the high reinforced group, but the low control group was rated higher than the low experimental group. Thus, the positive reinforcement of Structure and Production along with negative reinforcement of Consideration and Freedom had an adverse effect on the experimental group when compared with its control group.

TABLE 5

BEHAVIOR ADJUSTMENT RATINGS FOR 144 STUDENTS

	Control				C & F+; S & P-				S & P+; C & F-			
	High		Low		High		Low		High		Low	
	Pre_1	$Post_2$	Pre_3	$Post_4$	Pre_5	$Post_6$	Pre_7	$Post_8$	Pre_9	$Post_{10}$	Pre_{11}	$Post_{12}$
	56	52	33	40	56	59	32	50	57	57	39	29
	51	45	37	33	48	38	37	48	56	46	36	41
	50	60	35	47	54	58	30	29	50	53	38	33
	56	47	39	45	52	56	33	41	47	44	39	38
	50	55	37	42	53	52	28	34	55	43	33	35
	46	57	35	48	44	60	43	52	52	55	35	27
	47	44	35	32	55	53	42	48	50	48	35	25
	56	56	36	49	53	47	36	34	57	58	24	30
	52	46	38	45	54	57	38	42	51	59	35	36
	55	51	37	52	55	60	34	40	53	60	43	32
	54	56	32	47	56	57	45	43	55	48	45	42
	52	46	29	32	58	57	44	32	48	49	24	23
EX	625	615	423	512	638	654	442	493	631	620	426	411
M	52.08	51.25	35.25	42.66	53.17	54.50	36.83	41.08	52.58	51.67	35.50	34.25
SD	3.30	5.28	2.68	6.66	3.65	6.13	5.44	7.24	3.30	5.81	6.12	7.91

TABLE 6

ANALYSIS OF VARIANCE OF DATA IN TABLE 5

Source	SS	df	MS	F	p
Time (Pre-Post)	100	1	100.0	2.99	ns
Group (Hi-Lo)	8,040	1	8,040.0	240.43	.001
Condition (CF-SP)	205	2	102.5	3.07	.05
Time x Group	117	1	117.0	3.50	ns
Time x Condition	138	2	69.0	2.06	ns
Group x Condition	124	2	62.0	1.85	ns
Time x Group x Condition	113	2	56.5	1.69	ns
Error	4,414	132	33.44	-	
Total	13,251	143			

TABLE 7

ANALYSIS OF DATA FOR CONTROL GROUP AND C & F + GROUPS

Source	SS	df	MS	F	p
Time	222	1	222	7.29	.01
Group	4,565	1	4,565	149.97	.001
Condition	28	1	28	.92	
Time x Group	187	1	187	6.14	.05
Time x Condition	2	1	2	.07	
Group x Condition	28	1	28	.92	

(Continued)

TABLE 7 (Continued)

Source	SS	df	MS	F	P
Time x Group x Condition	43	1	43	1.41	
Error	2,679	88	30.44	-	
Total	7,754	95	-	-	

TABLE 8

ANALYSIS OF DATA FOR CONTROL GROUP AND S & P + GROUP

Source	SS	df	MS	F	P
Time	29	1	29	.91	ns
Group	5,385	1	5,385	168.12	.001
Condition	68	1	68	2.12	ns
Time x Group	94	1	94	2.93	ns
Time x Condition	126	1	126	3.93	ns
Group x Condition	134	1	134	4.18	.05
Time x Group x Condition	100	1	100	3.12	ns
Error	2,819	88	32.03	-	
Total	8,755	95	-	-	

The analysis for the two experimental groups was based on the data in columns five to 12 in Table 5. Results of the analysis are shown in Table 9. Again, there is highly significant variance between the Hi and Lo groups. There is also significant variance between the two reinforcement conditions. The C & F + groups were rated higher than the S & P + groups.

TABLE 9

ANALYSIS FOR C & F + AND S & P + GROUPS

Source	SS	df	MS	F	p
Time	18	1	18	.50	ns
Group	6,192	1	6,192	172.62	.001
Condition	182	1	182	5.07	.05
Time x Group	10	1	10	.28	ns
Time x Condition	109	1	109	3.04	ns
Group x Condition	53	1	53	1.48	ns
Time x Group x Condition	169	1	169	4.71	.05
Error	3,158	88	35.87	-	
Total	9,891	95	-	-	

In summary, the analysis of variance shows significant variance between the high and low groups in each of the four analytic designs. There is significant variance between before-test and after-test only when the control group is compared with the C & F + group. There is also significant interaction between Time (Before-After) and Group (Hi-Lo) for these groups. All except the high control group scored higher on the after-test than on the before-test. That is, they were rated as better adjusted on the second rating than on the first.

Significant variance between experimental conditions was found only when the C & F + group was compared with the S & P + group. The interaction of time x group x condition was also significant. Both the high and low groups were rated as better adjusted on the after-test than on the before-test when Consideration and Freedom were positively reinforced, while the reverse was true when Structure and Production were positively reinforced.

Significant interaction between Group (Hi-Lo) and Condition was found only when the control group was compared with the S & P + group. The high S & P + group was rated higher on both tests than

its control group, but the opposite was true for the low S & P + group.

The above results suggest that positive reinforcement of Structure and Production along with negative reinforcement of Consideration and Freedom tended to depress the adjustment of the poorly adjusted group, both in comparison with its control group and also in comparison with the group that viewed the opposite pattern of reinforcements.

EFFECTS OF REINFORCEMENT ON STUDENT ATTITUDE

Students filled out the Ideal Leader Behavior Description Questionnaire (LBDQ) before the films were shown, and again nine to 11 weeks later. The Ideal LBDQ measures attitude toward the different supervisory roles. Results of the research reviewed in Chapter I suggest that attitude may be more responsive to verbal reinforcement than overt behavior. In this event, one would expect the two kinds of reinforcement to produce different attitudes toward the five supervisory roles.

Table 10 shows the average attitude scores of the poorly adjusted (Lo) experimental and control groups. Neither experimental group differed significantly from the control group before the research began. After reinforcement, both experimental groups exhibited significantly less favorable attitudes toward Production Emphasis than the control group. The group that received positive reinforcement of Structure and Production (S & P +; C & F -) showed lower preferences for Representation and Structure than the control group, but the differences were not significant. There was no significant difference between the two experimental groups. However, the group receiving positive reinforcement of Consideration and Structure along with negative reinforcement of Structure and Production exhibited more favorable attitudes toward all the roles after reinforcement than the group under the opposite reinforcement condition.

Average attitude scores for the well adjusted (Hi) experimental and control groups are shown in Table 11. The experimental group that received positive reinforcement of Structure and Production (S & P +; C & F -) differed significantly from the control group in attitude toward Structure and Freedom before the research began, but not after. The group receiving positive reinforcement of Consideration and Freedom (C & F +; S & P -) did not differ significantly from the control group before, but exhibited a significantly more favorable attitude toward Representation after reinforcement, as well as a somewhat less favorable attitude toward Production Emphasis. There was no statistically significant difference between the two experimental groups. The group receiving positive reinforcement of Consideration and Freedom (C & F + ; S & P -) exhibited a less favorable attitude toward Tolerance of Freedom than the opposite group before reinforcement, but a more favorable attitude toward the role after reinforcement.

TABLE 10

MEAN ATTITUDE SCORES FOR LOW EXPERIMENTAL AND CONTROL GROUPS

Attitude	Control		S & P+; C & F-		C & F+; S & P-				
	M_1	SD_1	M_2	SD_2	M_3	SD_3	M_2-M_1	M_3-M_1	M_3-M_2
Before									
Representation	38.35	6.32	38.33	4.29	38.31	5.65	-.02	-.04	-.02
Structure	42.16	5.77	42.00	4.75	42.63	5.11	-.16	.47	.63
Freedom	34.19	5.11	34.17	5.20	36.13	4.98	-.02	1.94	1.96
Consideration	41.18	4.16	40.83	5.01	43.06	5.11	-.65	1.58	2.23
Production	36.00	5.95	34.75	5.38	32.94	6.48	-1.25	3.06	-1.81
After									
Representation	39.16	5.73	35.00	6.81	37.94	5.52	-4.16	-1.22	2.94
Structure	41.29	5.59	38.00	6.12	41.81	5.37	-3.29	.52	3.81
Freedom	34.58	4.00	33.92	5.50	36.75	4.31	-.66	2.17	2.83
Consideration	38.84	5.88	38.50	9.19	40.81	5.94	-.34	1.97	2.31
Production	35.48	4.95	31.83	4.45	32.25	4.99	-3.65*	-3.23*	.42
N	31		12		16				

*Significant at .05 level

TABLE II

MEAN ATTITUDE SCORES FOR HIGH EXPERIMENTAL AND CONTROL GROUPS

Attitude	Control		S & P+; C & F-		C & F+; S & P-				
	M_1	SD_1	M_2	SD_2	M_3	SD_3	M_2-M_1	M_3-M_1	M_3-M_2
Before									
Representation	38.65	5.99	38.55	7.64	40.81	4.42	-.10	2.16	2.26
Structure	41.26	4.35	43.70	4.11	43.38	4.83	2.44*	2.12	-.32
Freedom	34.00	5.72	38.05	5.29	35.69	4.32	4.05*	1.69	-2.36
Consideration	41.94	3.98	43.40	3.08	42.63	3.40	1.46	.69	-.77
Production	34.38	5.21	36.10	7.81	35.19	7.11	1.72	.81	-.91
After									
Representation	37.50	5.92	38.70	6.07	42.19	4.58	1.20	4.69**	3.49
Structure	40.15	5.32	43.05	5.92	40.81	6.69	2.90	.66	-2.24
Freedom	34.50	4.78	35.50	5.27	37.25	5.85	1.00	2.75	1.75
Consideration	41.32	4.45	42.95	4.82	42.44	6.75	1.63	1.12	-.51
Production	34.38	3.97	35.75	6.51	32.75	5.88	.97	-2.03	-3.00
N	34		20		16				

*Significant at .05 level

**Significant at .01 level

Average scores for the high and low experimental and control groups are shown in Table 12. There were no significant differences in attitude between the high and low control groups. Nor were there any significant differences between the high and low experimental groups before the experiment. For the groups that received positive reinforcement of Structure and Production (S & P +; C & F -), the well adjusted (Hi) group exhibited a significantly more favorable attitude (D = 5.05) toward Structuring Expectations than the poorly adjusted (Lo) group. The high group also showed a more favorable attitude than the low group toward Consideration, but the difference (4.45) was not statistically significant. Under positive reinforcement of Consideration and Structure (C & F +; S & P -), the high group exhibited a more favorable attitude than the low group toward Representation, but the difference (4.25) was not significant.

The foregoing discussion suggests that relative preference for some of the supervisory roles may have been changed by conditioning attempts. Some light can be thrown on this issue by rank ordering the means in Table 12 according to their magnitudes. The rank order of the before attitude scores (Table 12) of the high control group is as follows:

Rank	Role	Mean
1st	Consideration	41.94
2nd	Structure	41.26
3rd	Representation	38.65
4th	Production	34.38
5th	Freedom	34.00

Thus, Consideration is the most highly regarded role, while Tolerance of Freedom is least highly regarded.

The rank orders of the means in Table 12 are shown in Table 13. For the high control group, Production Emphasis was rated fourth and Tolerance of Freedom was fifth on the before-test. This order was reversed on the after-test, although the control group did not see the films. For the poorly adjusted (Lo) control group, preference for Representation and Consideration traded places for second and third ranks. This shift cannot be attributed to the experiment because the control group did not see the movies.

TABLE 12

MEAN ATTITUDE SCORES OF HIGH AND LOW EXPERIMENTAL AND CONTROL GROUPS

Attitude	Control			S & P+; C & F-			C & F+; S & P-		
	$High_1$	Low_2	1-2	$High_3$	Low_4	3-4	$High_5$	Low_6	5-6
Before									
Representation	38.65	38.35	.30	38.55	38.33	.22	40.81	38.31	2.52
Structure	41.26	42.16	.10	43.70	42.00	1.70	43.38	42.63	.75
Freedom	34.00	34.19	-.19	38.05	34.17	3.88	35.69	36.13	-.44
Consideration	41.94	41.48	.46	43.40	40.83	2.57	42.63	43.06	-.43
Production	34.38	36.00	-1.62	36.10	34.75	1.35	35.19	32.94	2.25
After									
Representation	37.50	39.16	-1.66	38.70	35.00	3.70	42.19	37.94	4.25
Structure	40.15	41.29	-1.14	43.05	38.00	5.05*	40.81	41.81	-1.00
Freedom	34.50	34.58	-.08	35.50	33.92	1.58	37.25	36.75	.50
Consideration	41.32	38.84	2.48	42.95	38.50	4.45	42.44	40.81	1.63
Production	34.38	35.48	-1.10	35.75	31.83	3.92	32.75	32.25	0.50
N	34	31		20	12		16	16	

*t is significant at .05 level

TABLE 13

RANK ORDER OF MEANS IN TABLE 12

Attitude	Control		S & P+; C & F-		C & F+; S & P-	
	High	Low	High	Low	High	Low
Before						
Representation	3	3	3	3	3	3
Structure	2	1	1	1	1	2
Freedom	5	5	4	5	4	4
Consideration	1	2	2	2	2	1
Production	4	4	5	4	5	5
After						
Representation	3	2	3	3	2	3
Structure	2	1	1	2	3	1
Freedom	4	5	5	4	4	4
Consideration	1	3	2	1	1	2
Production	5	4	4	5	5	5

The high group that received positive reinforcement for Structure and Production (S & P +; C & F -), changed its preference for Freedom and Production between the before- and after-tests. Production gained in preference. The low group under the same reinforcement conditions exhibited two shifts in preference. Consideration and Structure were reversed for first and second places, while Freedom and Production were reversed for fourth and fifth places. Both Structure and Production lost in preference despite the fact that they had been positively reinforced.

The well adjusted (Hi) group that received positive reinforcement of Consideration and Freedom (C & F+; S & P -), appears to have reacted strongly to the negative reinforcement of Structure

and Production. Liking for Structure dropped from first place on the before-test to third place on the after-test. Consideration rose from second to first place, and Representation rose from third to second place. The poorly adjusted (Lo) group under the same reinforcement conditions reversed its preference for Consideration and Structure. Consideration dropped from first to second place despite the positive reinforcement of Consideration and Freedom.

It would be of interest to know whether student response to supervision was related to attitude toward the supervisory roles. The correlations between teachers' ratings of student behavior and students' attitudes for the poorly adjusted (Lo) group are shown in Table 14. For the control group, before and after ratings of student ratings of student behavior were not highly related to student attitude toward the different supervisory roles.

For the group that received positive reinforcement of Structure and Production (S & P +; C & F -), favorable attitude toward Representation and Structure on the before-test negatively and significantly correlated (r = -.74 and -.67) with behavior ratings after the experiment. Attitude toward Representation after the experiment was also significantly related (r = -.64) to later ratings of behavior.

The group that received positive reinforcement of Consideration and Freedom (C & F +; S & P -) showed little relation between attitudes and behavior before the experiment. However, behavior adjustment after the experiment was negatively correlated (r = -.55 and -.51) with attitudes toward Structure both before and after reinforcement.

Table 15 shows the correlation between adjustment ratings and attitude scores for the well adjusted (Hi) group. Behavior ratings and attitude scores were not highly related either for the control group or for the group that received positive reinforcement of Structure and Production along with negative reinforcement of Consideration and Freedom. For the group that received positive reinforcement of Consideration and Freedom (C & F +; S & P -), attitude toward Structure after reinforcement was positively and significantly correlated (r = .55) with adjustment before the experiment. Attitude and adjustment were not highly related after the experiment.

It is difficult to draw any firm conclusions from the above correlations. For the poorly adjusted group, favorable attitude toward Representation is related to poor behavior adjustment after negative reinforcement of Consideration and Freedom (S & P +; C & F -). Favorable attitude toward Structure is related to poor adjustment after reinforcement of Structure and Production (C & F +; S & P -). These findings suggest the possibility that

TABLE 14

BEHAVIOR ADJUSTED RATINGS CORRELATED WITH STUDENT ATTITUDE SCORES FOR POORLY ADJUSTED (LOW) GROUP

Attitude	Control		S & P+; C & F-		C & F+; S & P-	
	Before	After	Before	After	Before	After
	r	r	r	r	r	r
Before						
Representation	.12	.11	-.38	-.74**	-.17	-.30
Structure	.18	-.05	-.61	-.67*	-.21	-.55*
Freedom	-.11	.18	-.19	-.17	.04	-.01
Consideration	.24	.34	.31	-.32	.09	-.28
Production	-.03	.08	.12	-.10	-.25	-.14
After						
Representation	-.20	.00	-.46	-.64*	-.15	-.37
Structure	-.16	.06	-.33	-.33	-.33	-.51*
Freedom	-.11	.09	-.30	.00	.17	.18
Consideration	-.13	-.02	-.34	-.02	.03	-.07
Production	-.22	.27	.33	.14	-.40	-.13

*t is significant at .05 level
**t is significant at .01 level

maintaining a favorable attitude toward a role after it has been negatively reinforced tends to interfere with adjustment to supervision. For the well adjusted group, although favorable attitude toward Structure after reinforcement condition (C & F +; S & P -) is related to good adjustment before the experiment, it is not related to adjustment after reinforcement.

TABLE 15

BEHAVIOR ADJUSTMENT RATINGS CORRELATED WITH
STUDENT ATTITUDES FOR WELL ADJUSTED (HIGH) GROUP

Attitude	Control		S & P+; C & F-		C & F+; S & P-	
	Before	After	Before	After	Before	After
	r	r	r	r	r	r
Before						
Representation	.30	.16	.12	.10	.32	-.18
Structure	.08	.02	.38	.23	.06	-.10
Freedom	.06	.31	-.01	.33	.44	.27
Consideration	-.16	.01	.03	-.14	-.41	-.38
Production	.16	-.15	.32	.24	.25	-.18
After						
Representation	.03	.23	-.08	-.08	.47	-.04
Structure	.19	.18	-.03	.17	.55*	.27
Freedom	-.02	.16	.10	.00	.04	.02
Consideration	-.12	.07	-.02	.16	.40	.05
Production	.15	.02	.22	.32	.27	.04

*t is significant at .05 level

IV. SUMMARY AND DISCUSSION

Groups of six to 10 students were shown five films each of which depicts a different pattern of supervisory behavior. The groups were composed about equally of students who had been rated by their teachers as responding (a) poorly to supervision or (b) well to supervision.

Following each film, a group immediately engaged in discussion of the supervisor shown in the movie.

For one set of groups, the discussion leader asked questions or made comments designed to reinforce in the discussants a favorable attitude toward the supervisors who played the roles entitled Consideration and Tolerance of Freedom. He attempted to reinforce an unfavorable attitude toward the roles entitled Structuring Expectations and Production Emphasis.

In the remaining groups an opposite procedure was employed. That is, the discussion leader attempted to reinforce a positive attitude toward the roles Structure and Production, but a negative attitude toward the roles Consideration and Freedom.

Two sets of scaled items were administered to measure the effects of the experimental procedures. These consisted of:

a. Teachers' ratings of student adjustment to supervision before discussion of the films, and again nine to 11 weeks later.

b. Students' responses to the Ideal Leader Behavior Description Questionnaire before discussion of the films and again nine to 11 weeks later. The Ideal LBDQ measures student attitudes toward the five supervisory roles depicted in the films.

The first of the above provided a measure of overt behavior, the other a measure of attitude.

It was hypothesized that the reinforcement of attitudes toward supervisory roles would be followed by changed response to supervision on the part of poorly adjusted students.

SUMMARY OF FINDINGS

1. The experimental and control groups were rather closely matched on ratings of adjustment to supervision before the research began (Tables 2 and 4).

2. After positive reinforcement of Structure and Production along with negative reinforcement of Consideration and Freedom, the low scoring experimental group was rated significantly lower in adjustment to supervision than its control group that did not see the films (Table 4).

3. There was no significant difference between the before and after behavior ratings for any experimental group. The poorly adjusted control group, however, was rated significantly higher on the second evaluation than on the first (Table 4).

4. The poorly adjusted experimental group that received positive reinforcement of Consideration and Freedom along with negative reinforcement of Structure and Production was rated significantly higher in adjustment after the experiment than the group under the opposite reinforcement conditions (Table 4).

5. Analysis of variance of six groups with 12 subjects in each revealed significant variance between the control groups and the C & F + groups for Time (Before-After) and Group (Hi-Lo). All except the high control group scored higher on the after-test than on the before-test (Table 7). When the control group was compared with the S & P + group, the only significant variance was between the high and low groups (Table 8). When the C & F + group was compared with the S & P + group, the C & F + group was rated significantly higher in adjustment than the S & P + group (Table 9).

6. The poorly adjusted experimental groups, after both conditions of reinforcement, exhibited significantly less favorable attitudes toward Production Emphasis than their control group (Table 10).

7. The well adjusted experimental group that received positive reinforcement of Consideration and Freedom (C & F +; S & P -) showed a significantly more favorable attitude toward Representation after reinforcement than its control group. Students receiving the two different reinforcement conditions did not differ significantly in their attitudes toward the supervisory roles either before or after reinforcement (Table 11).

8. The well adjusted group that received positive reinforcement of Structure and Production (S & P +; C & F -) exhibited a significantly more favorable attitude toward Structure than the poorly adjusted group under the same reinforcement condition (Table 12).

9. Some shift in preference for the different supervisory roles occurred for both the experimental and control groups. The largest shift was for the well adjusted experimental group that received positive reinforcement of Consideration and Freedom along with negative reinforcement of Structure and Production. For this group, liking for Structure dropped from first place before reinforcement to third place after reinforcement. Both Structure and Production lost in preference when they were positively reinforced. Consideration lost in preference when Consideration and Freedom were positively reinforced (Table 13).

10. Teachers' ratings of student behavior were not highly related to control group attitudes toward the five supervisory roles. Poorly adjusted students who exhibited favorable attitudes toward Representation and who received negative reinforcement of Consideration and Freedom were rated as responding poorly to supervision after reinforcement. Those exhibiting a favorable attitude toward Structure and receiving negative reinforcement of Structure and Production were also rated as responding poorly to supervision (Table 14). In the well adjusted group, for those who received positive reinforcement of Consideration and Freedom, a favorable attitude toward Structure after reinforcement was associated with better behavior adjustment before the experiment (Table 15).

DISCUSSION

The research was designed to test the hypothesis that reinforcement of positive attitudes toward certain supervisory roles along with the reinforcement of negative attitudes toward other roles would improve the response of maladjusted students to supervision. This hypothesis was not supported by the research results. Only the poorly adjusted control group exhibited significant improvement in behavior ratings. The poorly adjusted group that received positive reinforcement of Structure and Production along with negative reinforcement of Consideration and Freedom was rated lower in adjustment than its control group and also lower than the group that received the opposite reinforcement condition.

Consideration and Initiating Structure were the most highly valued of the supervisory roles shown to the students. For the poorly adjusted groups, positive reinforcement of a role reduced preference for it, while negative reinforcement increased preference for the role. These results suggest a resistant attitudinal response to reinforcement.

The findings on the relation of attitude to behavior adjustment indicate that maintaining a favorable attitude toward a role that had been negatively reinforced was associated with a worsened adjustment to supervision. These results also suggest a resistance

to reinforcement in that the negative reinforcement of a positively valued attitude produced undesired changes in overt behavior.

A possible explanation of the above results is suggested by the research reviewed in Chapter I. It was found that working-class boys tend to resist verbal reinforcement attempts. It seems probable also that boys who are resentful of authority will have had ample opportunity at home and at school to develop defenses against most forms of verbal appeal and persuasion. But this factor would not account for the differential effects of the two forms of reinforcement on the poorly adjusted group. If general resistance to reinforcement had been operating, then both experimental treatments should have produced unfavorable effects on student behavior. The more likely explanation of the research results appears to be the one which suggests that negative reinforcement of a positively valued attitude tends to exert an adverse effect on overt behavior.

IMPLICATIONS OF THE RESEARCH

The research appears to have delved into a problem that is of central concern in educational philosophy and instructional methodology. One hears much discussion of the objective of teaching democratic values and developing attitudes of responsible citizenship. This objective is directed toward attitude development and change.

It has long been assumed that attitudes tend to find expression in overt behavior. Religious institutions have always shown a deep concern for the attitudes of their members. Conformity in expression of belief has often been regarded as of overriding importance. Persuasion and various other forms of verbal reinforcement have been regarded as appropriate and effective methods for instilling attitudinal conformity. But sinners and backsliders have always been regrettably unresponsive to such reinforcement. They tend to continue in their nonconformity, which is expressed in overt behavior as well as in attitude.

It seems reasonable to believe that if we can induce individuals to adopt the attitudes we want them to hold then they will behave as we desire. It also seems reasonable to assume that systematic reinforcement will strengthen the attitude that we want the individual to hold. However, there appears to be a serious weakness at some point in this line of reasoning. The reinforcement of attitudes that are contrary to the individual's basic values seems to result in undesired rather than desired behavior.

The foregoing discussion suggests that we have very little understanding of what we are doing when we attempt to influence

attitudes as a means of changing overt behavior. The present research suggests that attitude reinforcement is not effective in producing desirable change in adjustment to supervision, especially for the poorly adjusted students who are most in need of behavior change. May not the possibility exist that attempts to instill favorable attitudes toward democratic processes, responsibility, citzenship, authority, and the like, produce behavioral results in many students that are exactly the opposite of those that we desire?

This research has raised far more questions than it has been able to answer. The questions are by no means trivial. They are concerned with basic problems in educational philosophy. They are as relevant to general education as to vocational and technical education.

A number of theoretical questions need to be answered before the reinforcement of attitudes can be recommended as a method for assisting vocational students to accept supervision. However, other methods are available that appear to produce favorable outcomes. Results of a previous study (Stogdill and Bailey, 1969) indicated that undirected discussion of the films (without reinforcement) results in improved adjustment to supervision. It may be that insight, rather than reinforcement of attitudes, is the more potent factor in bringing about desirable behavior change. This method appears to produce uniformly positive effects on student behavior.

REFERENCES

Argyris, C. *Personality and Organization*. New York: Harper and Brothers, 1957.

Bryan, J., and Lichtenstein, E. "Effect of Subject and Experimenter Attitudes in Verbal Conditioning." *Journal of Personality and Social Psychology*, 3 (1966), 182-189.

Dulany, D. E. "The Place of Hypotheses and Intentions: An Analysis of Verbal Control in Verbal Conditioning." *Journal of Personality*, 30 (Supplement) (1962), 102-109.

Ekman, P. *A Comparison of Verbal and Nonverbal Behavior as Reinforcing Stimuli of Opinion Responses*. Adelphi College Doctoral Dissertation, 1958.

Ferguson, D. C., and Buss, A. H. "Operant Conditioning of Hostile Verbs in Relation to Experimenter and Subject Characteristics." *American Psychologist*, 14 (1959), 387.

Hildum, D. C., and Brown, R. W. "Verbal Reinforcement and Interviewer Bias." *Journal of Abnormal and Social Psychology*, 53 (1956), 108-111.

Insko, C. A. "Verbal Reinforcement of Attitude." *Journal of Personality and Social Psychology*, 2 (1965), 621-623.

Krasner, L. "Studies of the Conditioning of Verbal Behavior." *Psychological Bulletin*, 55 (1958), 148-171.

Lange, C. J.; Rittenhouse, C. H.; and Atkinson, R. C. "Films and Group Discussions as a Means of Training Leaders." *Bibliography of Publications*. Alexandria, Virginia: Human Resources Research Organization, June, 1968.

McGregor, D. *The Human Side of Enterprise*. New York: McGraw-Hill, 1960.

Rosenhan, D., and Greenwald, J. A. "The Effects of Age, Sex, and Socioeconomic Class on Two Classes of Verbal Reinforcement." *Journal of Personality*, 33 (1965), 108-121.

Sapolsky, A. "Effect of Interpersonal Relationships Upon Verbal Conditioning." *Journal of Abnormal and Social Psychology*, 60 (1960), 241-246.

Sgan, Mabel L. "Social Reinforcement, Socioeconomic Status, and Susceptibility to Experimenter Influence." *Journal of Personality and Social Psychology*, 5 (1967), 202-210.

Spielberger, C. D. "The Role of Awareness in Verbal Conditioning." *Journal of Personality*, 30 (1962), 73-101.

Spielberger, C. D.; Berger, A.; and Howard, K. "Conditioning of Verbal Behavior as a Function of Awareness, Need for Social Approval, and Motivation to Receive Reinforcement." *Journal of Abnormal and Social Psychology*, 67 (1963), 241-246.

Spielberger, C. D.; Bernstein, I. H.; and Ratliff, R. G. "Information and Incentive Value of the Reinforcing Stimulus in Verbal Conditioning." *Journal of Experimental Psychology*, 71 (1966), 26-31.

Spielberger, C. D.; Levin, S. M.; and Shepard, M. "The Effects of Awareness and Attitude Toward Reinforcement on the Operant Conditioning of Verbal Behavior." *Journal of Personality*, 30 (1962), 106-121.

Stogdill, R. M. *Managers, Employees, Organizations*. Columbus: Bureau of Business Research, The Ohio State University, 1965.

Stogdill, R. M., and Bailey, W. R. *Changing the Response of Vocational Students to Supervision: The Use of Motion Pictures and Group Discussion*. Columbus: The Center for Vocational and Technical Education, The Ohio State University, 1969.

Stogdill, R. M.; Bailey, W. R.; and Coady, N. P. *Manual for Incidents in Leadership: A Set of Motion Pictures*. Columbus: The Center for Vocational and Technical Education, The Ohio State University, 1969.

Stogdill, R. M.; Goode, O. S.; and Day, D. R. "The Leader Behavior of Corporation Presidents." *Personnel Psychology*, 16 (1963), 127-132.

Stogdill, R. M.; Nickels, W. G.; and Zimmer, Adele. *Leadership: A Survey of Literature on Emergence of the Leadership Role*. Greensboro, North Carolina: Smith Richardson Foundation, 1970.

Verplanck, W. S. "The Control of the Content of Conversation: Reinforcement of Statements of Opinion." *Journal of Abnormal and Social Psychology*, 51 (1955), 668-676.

Watts, W. A. "Relative Persistence of Opinion Change Induced by Active Compared to Passive Participation." *Journal of Personality and Social Psychology*, 5 (1967), 4-15.

Zigler, E., and Kanzer, P. "The Effectiveness of Two Classes of Verbal Reinforcers on the Performance of Middle- and Lower-Class Children." *Journal of Personality*, 30 (1962), 157-163.

APPENDICES

A. BEHAVIOR DESCRIPTION SCALE

B. IDEAL LEADER BEHAVIOR DESCRIPTIONS

C. QUESTIONS USED IN REINFORCEMENT

APPENDIX A

Student's Name _____ _____

Instructor's Initials _____

BEHAVIOR DESCRIPTION SCALE

Directions: Please use the following items to describe the behavior of the student named above. DRAW A CIRCLE around one of the letters - A B C D E - after each item to show how frequently he behaves as described by the item.

A = Always
B = Often
C = Occasionally
D = Seldom
E = Never

1.	Tries hard	A B C D E
2.	Follows directions carefully	A B C D E
3.	Completes assigned tasks	A B C D E
4.	Loafs on the job	A B C D E
5.	Resents being told what to do	A B C D E
6.	Has a chip on his shoulder	A B C D E
7.	Seems to resent authority	A B C D E
8.	Creates disturbances	A B C D E
9.	Becomes angry when mistakes are called to his attention	A B C D E
10.	Is insolent and discourteous	A B C D E
11.	Exhibits "don't care" attitude	A B C D E
12.	Gets along well with other students	A B C D E

SCORING KEY

Behavior Description Scale

Item Number	Item Score A	B	C	D	E	Example of Scoring					
1	5	4	3	2	1	A	B	(C)	D	E	3
2	5	4	3	2	1	A	B	C	(D)	E	2
3	5	4	3	2	1	A	B	(C)	D	E	3
4	1	2	3	4	5	A	B	(C)	D	E	3
5	1	2	3	4	5	A	(B)	C	D	E	2
6	1	2	3	4	5	A	(B)	C	D	E	2
7	1	2	3	4	5	A	(B)	C	D	E	2
8	1	2	3	4	5	A	B	C	(D)	E	4
9	1	2	3	4	5	(A)	B	C	D	E	1
10	1	2	3	4	5	A	(B)	C	D	E	2
11	1	2	3	4	5	A	(B)	C	D	E	2
12	5	4	3	2	1	(A)	B	C	D	E	5
											31

The score for an item is the score of the circles response.

The Total Score is the sum of the 12 item scores.

APPENDIX B

WHAT AN IDEAL SUPERVISOR SHOULD DO

Developed by staff members of
The Ohio State Leadership Studies

On the following pages is a list of items that may be used to describe the behavior of a supervisor, as you think he should act. This is not a test of ability. It simply asks you to describe what you think an ideal leader ought to do in supervising a group in which you might be a member.

Published by
Bureau of Business Research
College of Commerce and Administration
The Ohio State University
Columbus, Ohio 43210

Copyright 1962.

DIRECTIONS:

a. READ each item carefully.

b. THINK about how frequently a supervisor OUGHT to behave as described by the item.

c. DECIDE whether he SHOULD always, often, occasionally, seldom, or never act as described by the item.

d. DRAW A CIRCLE around one of the five letters following the item to show the answer you have selected.

A = Always
B = Often
C = Occasionally
D = Seldom
E = Never

e. MARK your answers as shown in the examples below.

Example: should often act as described . . . . . A (B) C D E

Example: should never act as described . . . . . A B C D (E)

Example: should occasionally act as described . A B (C) D E

HE OUGHT TO:

1. act as the spokesman of the group . . . . . A B C D E
2. let group members know what is expected of them . A B C D E
3. allow the members complete freedom in their work. A B C D E
4. be friendly and approachable . . . . . A B C D E
5. encourage overtime work . . . . . A B C D E
6. publicize the activities of the group . . . . . A B C D E
7. encourage the use of uniform procedures . . . . . A B C D E
8. permit the members to use their own judgment in solving problems . . . . . A B C D E
9. do little things to make it pleasant to be a member of the group . . . . . A B C D E
10. stress being ahead of competing groups . . . . . A B C D E

A = Always
B = Often
C = Occasionally
D = Seldom
E = Never

11. speak as the representative of the group . . . . A B C D E
12. try out his new ideas in the group . . . . . A B C D E
13. encourage initiative in the group members . . . . A B C D E
14. put suggestions made by the group into operation. A B C D E
15. needle members for greater effort . . . . . A B C D E
16. speak for the group when visitors are present . . A B C D E
17. make his attitudes clear to the group . . . . . A B C D E
18. let the members do their work the way they think best . . . . . A B C D E
19. treat all group members as his equals . . . . . A B C D E
20. keep the work moving at a rapid pace . . . . . A B C D E
21. represent the group at outside meetings . . . . . A B C D E
22. decide what shall be done and how it shall be done . . . . . A B C D E
23. assign a task, then let the members handle it . . A B C D E
24. give advance notice of changes . . . . . A B C D E
25. push for increased production . . . . . A B C D E
26. know a large number of people . . . . . A B C D E
27. assign group members to their jobs . . . . . A B C D E
28. turn the members loose on a job, and let them go to it . . . . . A B C D E
29. keep to himself . . . . . A B C D E
30. ask the members to work harder . . . . . A B C D E
31. show visitors what is being done . . . . . A B C D E

A = Always
B = Often
C = Occasionally
D = Seldom
E = Never

32. make sure that his part in the group is understood by the group members . . . . . A B C D E

33. refuse to allow the members any freedom of action . . . . . A B C D E

34. look out for the personal welfare of group members . . . . . A B C D E

35. permit the members to take it easy in their work. A B C D E

36. prepare publicity materials . . . . . A B C D E

37. schedule the work to be done . . . . . A B C D E

38. allow the group a high degree of initiative . . . A B C D E

39. be willing to make changes . . . . . A B C D E

40. drive hard when there is a job to be done . . . . A B C D E

41. write for publication . . . . . A B C D E

42. maintain definite standards of performance . . . A B C D E

43. trust the members to exercise good judgment . . . A B C D E

44. explain his actions fully . . . . . A B C D E

45. urge the group to beat its previous record . . . A B C D E

46. speak for the entire organization . . . . . A B C D E

47. ask that group members follow standard rules and regulations . . . . . A B C D E

48. permit the group to set its own pace . . . . . A B C D E

49. act without consulting the group . . . . . A B C D E

50. keep the group working to capacity . . . . . A B C D E

SCORING KEY

What an Ideal Supervisor Should Do

Items 29, 33, 35, and 49 should be scored first.

They are scored:

Response:	A	B	C	D	E
Score:	1	2	3	4	5

All the remaining items are scored:

Response:	A	B	C	D	E
Score:	5	4	3	2	1

Enter the item scores on the following SCORING SHEET.

SCORING SHEET

What an Ideal Supervisor Should Do

Student's Name _____

											Total
Representation .	1_	6_	11_	16_	21_	26_	31_	36_	41_	46_	_____
Structure . . .	2_	7_	12_	17_	22_	27_	32_	37_	42_	47_	_____
Freedom	3_	8_	13_	18_	23_	28_	33_	38_	43_	48_	_____
Consideration .	4_	9_	14_	19_	24_	29_	34_	39_	44_	49_	_____
Production . . .	5_	10_	15_	20_	25_	30_	35_	40_	45_	50_	_____

Add the items (1, 6, 11, etc.) across in order to obtain the total score for Representation.

Add the items (2, 7, 12, etc.) across to obtain the total score for Structure.

Add across to obtain total scores for Freedom, Consideration, and Production.

APPENDIX C

QUESTIONS AND COMMENTS USED AS REINFORCERS FOR FOUR LEADERSHIP ROLES

STRUCTURING EXPECTATIONS

Favorable Comments

1. Wouldn't you like to work for a boss like Mr. Maxwell, who always told you where you stand?

2. Don't you feel that Mr. Maxwell did a good job of explaining to Tim and Ron what their jobs will involve?

3. Do you feel that Mr. Maxwell tried to do a good job of treating everyone fairly?

4. What do you feel is the reason Mr. Maxwell's shop has such a good safety record?

5. Don't you agree with Mr. Maxwell that a lot of misunderstandings could be avoided if all the employees knew the company rules that applied to them?

6. Don't you feel that Mr. Maxwell had developed a good procedure for promotions?

7. Mr. Maxwell seemed well organized, didn't he?

8. It would be discouraging to work for someone who played favorites. You wouldn't have to worry about that with Mr. Maxwell, would you?

9. It's nice to know exactly what you have to do, isn't it?

Unfavorable Comments

1. Would you like your work checked by someone all the time?

2. Mr. Maxwell admits that he is not a favorite among the men--why do you think he is not well liked?

3. Do you think that Mr. Maxwell gave Tim and Ron an opportunity to make any decisions for themselves?

4. Mr. Maxwell revised the production schedule daily--if you were a foreman working under him, can you foresee any problems?

5. Mr. Maxwell doesn't tolerate any fooling around and claims that a low accident rate is the result. Do you <u>really</u> feel that a little horseplay causes accidents?

6. Do you feel that Mr. Maxwell sees his employees as individuals capable of making mistakes?

7. Working for Mr. Maxwell would be like being in the Army, wouldn't it?

8. Do you suppose that some of the men are unhappy because Mr. Maxwell doesn't let them do much on their own?

9. It would be a bother to look up a rule for everything all the time, wouldn't it?

TOLERANCE OF FREEDOM

Favorable Comments

1. Mr. Bailey seems to trust his employees, doesn't he?

2. Those working for Mr. Bailey have been given a fine opportunity to work on their own, haven't they?

3. Wouldn't you like to work for someone like Mr. Bailey who isn't always looking over your shoulder and telling you exactly what to do?

4. Don't you feel that more can be accomplished if the men don't have to wait for their boss to check their work?

5. Mr. Bailey posts his smaller jobs on the bulletin board and lets his men choose their own tasks--don't you feel that this is preferable to arbitrarily assigning the job?

6. Mistakes can usually be corrected, noted Mr. Bailey, "but it is hard to correct something that hasn't been done yet," don't you agree?

7. It certainly would be nice to work at your own speed and pace, wouldn't it?

8. Initiative and resourcefulness as Mr. Bailey said are to be highly valued, aren't they?

Unfavorable Comments

1. Wouldn't it be a little frustrating working for Mr. Bailey if you didn't know exactly what to do?

2. If you made a mistake on one of Mr. Bailey's jobs, you would really be sticking your neck out, wouldn't you?

3. Don't you think that most fellows want to get clear instructions and do the job, instead of having to figure out the whole thing--that's what Mr. Bailey is getting paid for, isn't it?

4. Mr. Bailey thinks mistakes can usually be corrected--can you think of any problems that could come up because he wasn't supervising his men?

5. Mr. Bailey doesn't seem to give his men much help, does he?

6. It wouldn't be easy to work for a man like Mr. Bailey who expects a lot from his men, would it?

7. Do you think that if you made a mistake Mr. Bailey would really feel that he was more responsible for it than you?

8. How would Mr. Bailey ever know that you did a good job if he never checks your work?

CONSIDERATENESS

Favorable Comments

1. Mr. Dyson seemed to really care for his people, didn't he?

2. How many of you would have given up a personal gift for your employees?

3. Mr. Dyson carefully asked for suggestions about where to place the new machines. Wasn't it a good idea to involve his people as much as possible?

4. Don't you agree that safety and comfort of employees are equally important to an immediate cash return for repairs?

5. It would be a pleasure to work for a man like Mr. Dyson who goes out of his way for his men, wouldn't it?

6. I'll bet that the men working for Mr. Dyson really enjoy their work, don't you?

Unfavorable Comments

1. At the conclusion of the film, Mr. Dyson admits that he has suggested some expensive repairs that won't pay for themselves--but will simply make the men more comfortable. Don't you agree that this is a short-sided outlook?

2. Can you see any problems of a boss attending parties with his employees?

3. Mr. Dyson admitted on the phone that his men were not supposed to replace broken glass, but was about to violate company policy--is this wise?

4. Would you want to work for a boss who wants to be "just one of the boys?"

5. You wouldn't like to be expected to turn in suggestions all the time like Mr. Dyson's men were--would you?

6. Mr. Dyson is being paid to make decisions--isn't he just passing the buck if he asks for suggestions from his employees?

PRODUCTION EMPHASIS

Favorable Comments

1. Don't you think that Mr. Beavers' emphasis on competition between departments, like that between football teams, is a good idea?

2. Mr. Beavers certainly understands the point of view of the customer--in wanting his contract honored, doesn't he?

3. Don't you feel as did Mr. Beavers, that teamwork and cooperation are important for the success of any group?

4. Mr. Beavers said "Pride in your work and enthusiasm are certainly important ingredients to the success of any job,"--don't you agree?

5. Isn't it important to always try to do better, as Mr. Beavers stated?

6. Mr. Beavers appreciates the importance of meeting one's production contracts, doesn't he?

7. Where would the company be without men like Mr. Beavers to make sure that people are doing their best?

8. Mr. Beavers seems on top of the situation, doesn't he?

Unfavorable Comments

1. Do you think that Mr. Beavers really cared about his men?

2. Do you feel that Tom Owens and Ned Lewis are really too softhearted toward their subordinates?

3. If the men were already meeting their production quotas--why do you think Mr. Beavers wants them to work harder?

4. Tom Owens said that output in his group was lower because of broken machines and some illness. Don't you feel that this is a reasonable explanation?

5. Don't you feel that the fellows' complaints about the production quotas are probably justified?

6. Would you like to work overtime when anyone in the shop is sick?

7. It certainly would be difficult to concentrate on your work with all that pressure for output, wouldn't it?